ABSTRACT OF THE DISCLOSURE

A technique for use in fabricating an integrated circuit are disclosed. The method generally begins by performing an operation on a wafer using a fabrication tool. Next, volatiles are desorbed from the wafer. The desorbed volatiles are sampled and raw spectral data indicating the content of the desorbed volatiles is generated. The raw spectral data is subjected to a spectroscopic analysis. An operational parameter of the fabrication tool is then modified responsive to the result of the results of the spectroscopic analysis. In one particular aspect of the invention, a controller receives the raw spectral data and processes the raw spectral data to determine the presence of a residual material on the wafer. The controller then controls the process flow operation to reduce the amount of the residual material on the wafer responsive to the results of processing the raw spectral data. Other aspects of the invention include the apparatus implementing the process flow and the controller itself.